



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5 CHICAGO REGIONAL LABORATORY  
536 SOUTH CLARK STREET  
CHICAGO, ILLINOIS 60605

**Date:** 6/6/2018  
**Subject:** Review of Region 5 Data for Central Sands  
**To:** Water Division, WECA Region 5  
77 West Jackson Boulevard  
Chicago, IL 60604  
**From:** Francis Awanya, Chemist  
US EPA Region 5 Chicago Regional Laboratory

The data transmitted under this cover memo successfully passed CRL's data review procedures as documented in the current Quality Management Plan and applicable Standard Operating Procedures. In accordance with the EPA QA/G-8 *Guidance on Environmental Data Verification and Data Validation* and the U.S. EPA Region 5 RMD QMP, CRL performs data verification on all the data generated internally. CRL does not perform data validation or quality assessment procedures.

This report was reviewed and the information provided herein accurately represents the analysis performed.

*Francis A Awanya*

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*Please contact the analyst with any technical report issues, Robert Thompson at (312)-353-9078 for sample project concerns, and Sylvia Griffin at (312)-353-9073 with data transmittal questions. Thank you.*

**Attached are Results for: Central Sands**

**Analyses included in this report:**

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Solids, TDS



# Environmental Protection Agency Region 5 Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605  
Phone:(312)353-8370 Fax:(312)886-2591

Water Division, WECA Region 5 77 West Jackson Boulevard Chicago IL, 60604	Project: Central Sands Project Number: CB022018 Project Manager: Cheryl Burdett	<b>Reported:</b> Jun-06-18 14:55
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## Accredited Analyses included in this Report



**Method:** *SM 2540 C in Water*

**Analysis:** *Solids, TDS*

**Analyte**

**Certifications**

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Total Dissolved Solids

ISO/IEC 17025:2005

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*Analytes not listed above are not accredited by ANAB.*



# Environmental Protection Agency Region 5 Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605  
Phone:(312)353-8370 Fax:(312)886-2591

Water Division, WECA Region 5  
77 West Jackson Boulevard  
Chicago IL, 60604

Project: Central Sands  
Project Number: CB022018  
Project Manager: Cheryl Burdett

**Reported:**  
Jun-06-18 14:55

## Analysis Case Narrative

### General Information

Ninety-eight (98) water samples collected for the project were received at the Chicago Regional Laboratory (CRL) on May 2 and May 4, 2018. The samples were logged in the CRL LIMS under Work Order Number 1805005 and 1805007. Total Dissolved Solids (TDS) analysis was assigned to those samples. The samples were analyzed for TDS using Standard Operating Procedure (SOP) CRL Document # AIG017 Version # 5 (Based on SM 2540 C (APHA, AWWA, WEF)). The designated analyst is Francis Awanya. Francis can be reached at 312-886-3682. Other pertinent information is provided in the final analysis report.

The following samples could not be processed and analyzed within the holding time. The sample results were flagged "J"; The identification of the analyte is acceptable; the reported value is an estimate. The affected samples are 1805005-01 (Sample name: A1a), 1805005-02 (Sample name: A1b), 1805007-01 (Sample name: D5a), 1805007-02 (Sample name: D5b), 1805007-03 (Sample name: D6a), and 1805007-04 (Sample name: D6b), 1805007-05 (Sample name: D7 equip), 1805007-06 (Sample name: FB3), 1805007-07 (Sample name: D7a Dup), and 1805007-08 (Sample name: D7a), 1805007-09 (Sample name: D7b), and 1805007-10 (Sample name: D8A).

All supporting data are archived with Work Order Number 1805005.

### Sample Analysis and Results

The data reported herein met the requirements of Standard Operating Procedure (SOP) CRL Document # AIG017 Version # 5 (Based on SM 2540 C (APHA, AWWA, WEF)) and any laboratory specifications contained in the sampling QAPP "*FINAL\_2018 GW Sampling Plan4\_27\_2018.pdf*". Exceptions are discussed above and in the Quality Control (QC) section.

### Quality Control

All required quality control criteria for the laboratory, method, and system performance audits were evaluated and determined to be within the CRL's QC limits with the following exceptions.

Duplicate audit: The reproducibility of 13% and 14% obtained for samples 1805005-15 (Sample name: B2b) and 1805005-21 (Sample name: C1b) respectively exceeded the limit of 10% Relative. The absolute differences obtained for both samples were less than detection. No flags were applied to the two sample results.



# Environmental Protection Agency Region 5 Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605  
Phone:(312)353-8370 Fax:(312)886-2591

## WORK ORDER

Printed: 5/3/2018 3:33:25PM

**1805005**

### US EPA Region 5 Chicago Regional Laboratory

**Client:** Water Division, WECA Region 5  
**Project:** Central Sands

**Project Manager:** Angela Ockrassa Davis  
**Project Number:** [none]

**Report To:**

Cheryl Burdett  
Water Division, WECA Region 5

77 West Jackson Boulevard  
Chicago, IL 60604

Phone: (312) 886-1463  
Fax: (312) 886-2001

Date Due: Jun-04-18 15:00 (32 day TAT)  
Received By: Colin Breslin  
Logged In By: Robert Snyder

Date Received: May-02-18 09:55  
Date Logged In: May-03-18 09:30

**Samples Received at:**

Sample tags/labels **Yes**  
Seals Intact **Yes**  
Received on ice **Yes**  
Paperwork Included **Yes**

**Work Order Comments:**

Anions: Chloride and nitrate as NO3  
Full List metals

**Sample ID:** [1805005-01](#)      **Sampled:** [Apr-30-18 07:19](#)      **Matrix:** [Water](#)

**Sample Name:** [A1a](#)      **Sample Location/Comments:** [1st Street](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 07:19	pH = 2
Anions by IC	28	May-28-18 07:19	pH = 7
Metals ICP-AES (w)	180	Oct-27-18 07:19	pH = 3
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 07:19	pH = 2
Solids, TDS	7	May-07-18 07:19	pH = 7
TKN DA	28	May-28-18 07:19	pH = 2
TOC	28	May-28-18 07:19	pH = 2
Total Phosphorus DA	28	May-28-18 07:19	pH = 2

**Sample ID:** [1805005-02](#)      **Sampled:** [Apr-30-18 07:32](#)      **Matrix:** [Water](#)

**Sample Name:** [A1b](#)      **Sample Location/Comments:** [1st Street](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 07:32	pH = 2
Anions by IC	28	May-28-18 07:32	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 07:32	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 07:32	pH = 2

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: [none]

Sample ID: [1805005-02](#)      Sampled: [Apr-30-18 07:32](#)      Matrix: [Water](#)

Sample Name: [A1b](#)

Sample Location/Comments: [1st Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Solids, TDS	7	May-07-18 07:32	pH = 5
TKN DA	28	May-28-18 07:32	pH = 2
TOC	28	May-28-18 07:32	pH = 2
Total Phosphorus DA	28	May-28-18 07:32	pH = 2

Sample ID: [1805005-03](#)      Sampled: [Apr-30-18 08:15](#)      Matrix: [Water](#)

Sample Name: [A2a](#)

Sample Location/Comments: [22nd Avenue North](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 08:15	pH = 2
Anions by IC	28	May-28-18 08:15	pH = 6
Metals ICP-AES (w)	180	Oct-27-18 08:15	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 08:15	pH = 2
Solids, TDS	7	May-07-18 08:15	pH = 6
TKN DA	28	May-28-18 08:15	pH = 2
TOC	28	May-28-18 08:15	pH = 2
Total Phosphorus DA	28	May-28-18 08:15	pH = 2

Sample ID: [1805005-04](#)      Sampled: [Apr-30-18 08:24](#)      Matrix: [Water](#)

Sample Name: [A2b](#)

Sample Location/Comments: [22nd Avenue North](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 08:24	pH = 2
Anions by IC	28	May-28-18 08:24	pH = 6
Metals ICP-AES (w)	180	Oct-27-18 08:24	pH = 5
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 08:24	pH = 2
Solids, TDS	7	May-07-18 08:24	pH = 6
TKN DA	28	May-28-18 08:24	pH = 2
TOC	28	May-28-18 08:24	pH = 2
Total Phosphorus DA	28	May-28-18 08:24	pH = 2

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: [none]

Sample ID: [1805005-05](#) Sampled: [Apr-30-18 09:06](#) Matrix: [Water](#) [QC Source Sample MS/MSD](#)

Sample Name: [A3a](#) Sample Location/Comments: [2nd Street](#)

Sample Comments: [MS/MSD](#)

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 09:06	pH = 2
Anions by IC	28	May-28-18 09:06	pH = 6
Metals ICP-AES (w)	180	Oct-27-18 09:06	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 09:06	pH = 2
Solids, TDS	7	May-07-18 09:06	pH = 6
TKN DA	28	May-28-18 09:06	pH = 2
TOC	28	May-28-18 09:06	pH = 2
Total Phosphorus DA	28	May-28-18 09:06	pH = 2

Sample ID: [1805005-06](#) Sampled: [Apr-30-18 09:14](#) Matrix: [Water](#)

Sample Name: [A3b](#) Sample Location/Comments: [2nd Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 09:14	pH = 2
Anions by IC	28	May-28-18 09:14	pH = 6
Metals ICP-AES (w)	180	Oct-27-18 09:14	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 09:14	pH = 2
Solids, TDS	7	May-07-18 09:14	pH = 6
TKN DA	28	May-28-18 09:14	pH = 2
TOC	28	May-28-18 09:14	pH = 2
Total Phosphorus DA	28	May-28-18 09:14	pH = 2

Sample ID: [1805005-07](#) Sampled: [Apr-30-18 09:38](#) Matrix: [Water](#)

Sample Name: [A4 Equip](#) Sample Location/Comments: [Cranberry Rock Road](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 09:38	pH = 2
Anions by IC	28	May-28-18 09:38	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 09:38	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 09:38	pH = 2
Solids, TDS	7	May-07-18 09:38	pH = 5
TKN DA	28	May-28-18 09:38	pH = 2
TOC	28	May-28-18 09:38	pH = 2

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: [none]

Sample ID: [1805005-07](#) Sampled: [Apr-30-18 09:38](#) Matrix: [Water](#)

Sample Name: [A4 Equip](#) Sample Location/Comments: [Cranberry Rock Road](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-28-18 09:38	pH = 2

Sample ID: [1805005-08](#) Sampled: [Apr-30-18 09:06](#) Matrix: [Water](#)

Sample Name: [A3a \(Dup\)](#) Sample Location/Comments: [2nd Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 09:06	pH = 2
Anions by IC	28	May-28-18 09:06	pH = 6
Metals ICP-AES (w)	180	Oct-27-18 09:06	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 09:06	pH = 2
Solids, TDS	7	May-07-18 09:06	pH = 6
TKN DA	28	May-28-18 09:06	pH = 2
TOC	28	May-28-18 09:06	pH = 2
Total Phosphorus DA	28	May-28-18 09:06	pH = 2

Sample ID: [1805005-09](#) Sampled: [Apr-30-18 09:49](#) Matrix: [Water](#)

Sample Name: [FB1](#) Sample Location/Comments: [Cranberry Rock Road](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 09:49	pH = 2
Anions by IC	28	May-28-18 09:49	pH = 4
Metals ICP-AES (w)	180	Oct-27-18 09:49	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 09:49	pH = 2
Solids, TDS	7	May-07-18 09:49	pH = 4
TKN DA	28	May-28-18 09:49	pH = 2
TOC	28	May-28-18 09:49	pH = 2
Total Phosphorus DA	28	May-28-18 09:49	pH = 2

Sample ID: [1805005-10](#) Sampled: [Apr-30-18 09:58](#) Matrix: [Water](#)

Sample Name: [A4a](#) Sample Location/Comments: [Cranberry Rock Road](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 09:58	pH = 2
Anions by IC	28	May-28-18 09:58	pH = 6

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: [none]

Sample ID: [1805005-10](#) Sampled: [Apr-30-18 09:58](#) Matrix: [Water](#)

Sample Name: [A4a](#) Sample Location/Comments: [Cranberry Rock Road](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-27-18 09:58	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 09:58	pH = 2
Solids, TDS	7	May-07-18 09:58	pH = 6
TKN DA	28	May-28-18 09:58	pH = 2
TOC	28	May-28-18 09:58	pH = 2
Total Phosphorus DA	28	May-28-18 09:58	pH = 2

Sample ID: [1805005-11](#) Sampled: [Apr-30-18 10:09](#) Matrix: [Water](#)

Sample Name: [A4b](#) Sample Location/Comments: [Cranberry Rock Road](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 10:09	pH = 2
Anions by IC	28	May-28-18 10:09	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 10:09	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 10:09	pH = 2
Solids, TDS	7	May-07-18 10:09	pH = 5
TKN DA	28	May-28-18 10:09	pH = 2
TOC	28	May-28-18 10:09	pH = 2
Total Phosphorus DA	28	May-28-18 10:09	pH = 2

Sample ID: [1805005-12](#) Sampled: [Apr-30-18 10:51](#) Matrix: [Water](#)

Sample Name: [B1a](#) Sample Location/Comments: [20th Avenue](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 10:51	pH = 3
Anions by IC	28	May-28-18 10:51	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 10:51	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 10:51	pH = 3
Solids, TDS	7	May-07-18 10:51	pH = 5
TKN DA	28	May-28-18 10:51	pH = 3
TOC	28	May-28-18 10:51	pH = 3
Total Phosphorus DA	28	May-28-18 10:51	pH = 3

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: [none]

Sample ID: [1805005-13](#)      Sampled: [Apr-30-18 10:58](#)      Matrix: [Water](#)

Sample Name: [B1b](#)      Sample Location/Comments: [20th Avenue](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 10:58	pH = 2
Anions by IC	28	May-28-18 10:58	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 10:58	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 10:58	pH = 2
Solids, TDS	7	May-07-18 10:58	pH = 5
TKN DA	28	May-28-18 10:58	pH = 2
TOC	28	May-28-18 10:58	pH = 2
Total Phosphorus DA	28	May-28-18 10:58	pH = 2

Sample ID: [1805005-14](#)      Sampled: [Apr-30-18 11:40](#)      Matrix: [Water](#)

Sample Name: [B2a](#)      Sample Location/Comments: [3rd Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 11:40	pH = 2
Anions by IC	28	May-28-18 11:40	pH = 7
Metals ICP-AES (w)	180	Oct-27-18 11:40	pH = 4
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 11:40	pH = 2
Solids, TDS	7	May-07-18 11:40	pH = 7
TKN DA	28	May-28-18 11:40	pH = 2
TOC	28	May-28-18 11:40	pH = 2
Total Phosphorus DA	28	May-28-18 11:40	pH = 2

Sample ID: [1805005-15](#)      Sampled: [Apr-30-18 11:48](#)      Matrix: [Water](#)

Sample Name: [B2b](#)      Sample Location/Comments: [3rd Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 11:48	pH = 2
Anions by IC	28	May-28-18 11:48	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 11:48	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 11:48	pH = 2
Solids, TDS	7	May-07-18 11:48	pH = 5
TKN DA	28	May-28-18 11:48	pH = 2
TOC	28	May-28-18 11:48	pH = 2

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: [none]

Sample ID: [1805005-15](#) Sampled: [Apr-30-18 11:48](#) Matrix: [Water](#)

Sample Name: [B2b](#) Sample Location/Comments: [3rd Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-28-18 11:48	pH = 2

Sample ID: [1805005-16](#) Sampled: [Apr-30-18 12:29](#) Matrix: [Water](#)

Sample Name: [B3a](#) Sample Location/Comments: [3rd Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 12:29	pH = 2
Anions by IC	28	May-28-18 12:29	pH = 6
Metals ICP-AES (w)	180	Oct-27-18 12:29	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 12:29	pH = 2
Solids, TDS	7	May-07-18 12:29	pH = 6
TKN DA	28	May-28-18 12:29	pH = 2
TOC	28	May-28-18 12:29	pH = 2
Total Phosphorus DA	28	May-28-18 12:29	pH = 2

Sample ID: [1805005-17](#) Sampled: [Apr-30-18 12:36](#) Matrix: [Water](#)

Sample Name: [B3b](#) Sample Location/Comments: [3rd Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 12:36	pH = 2
Anions by IC	28	May-28-18 12:36	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 12:36	pH = 3
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 12:36	pH = 2
Solids, TDS	7	May-07-18 12:36	pH = 5
TKN DA	28	May-28-18 12:36	pH = 2
TOC	28	May-28-18 12:36	pH = 2
Total Phosphorus DA	28	May-28-18 12:36	pH = 2

Sample ID: [1805005-18](#) Sampled: [Apr-30-18 13:10](#) Matrix: [Water](#)

Sample Name: [B4a](#) Sample Location/Comments: [3rd Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 13:10	pH = 2
Anions by IC	28	May-28-18 13:10	pH = 5

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: [none]

Sample ID: [1805005-18](#)      Sampled: [Apr-30-18 13:10](#)      Matrix: [Water](#)

Sample Name: [B4a](#)      Sample Location/Comments: [3rd Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-27-18 13:10	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 13:10	pH = 2
Solids, TDS	7	May-07-18 13:10	pH = 5
TKN DA	28	May-28-18 13:10	pH = 2
TOC	28	May-28-18 13:10	pH = 2
Total Phosphorus DA	28	May-28-18 13:10	pH = 2

Sample ID: [1805005-19](#)      Sampled: [Apr-30-18 13:41](#)      Matrix: [Water](#)

Sample Name: [B4b](#)      Sample Location/Comments: [3rd Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 13:41	pH = 2
Anions by IC	28	May-28-18 13:41	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 13:41	pH = 4
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 13:41	pH = 2
Solids, TDS	7	May-07-18 13:41	pH = 5
TKN DA	28	May-28-18 13:41	pH = 2
TOC	28	May-28-18 13:41	pH = 2
Total Phosphorus DA	28	May-28-18 13:41	pH = 2

Sample ID: [1805005-20](#)      Sampled: [Apr-30-18 15:02](#)      Matrix: [Water](#)

Sample Name: [C1a](#)      Sample Location/Comments: [2nd Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 15:02	pH = 2
Anions by IC	28	May-28-18 15:02	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 15:02	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 15:02	pH = 2
Solids, TDS	7	May-07-18 15:02	pH = 5
TKN DA	28	May-28-18 15:02	pH = 2
TOC	28	May-28-18 15:02	pH = 2
Total Phosphorus DA	28	May-28-18 15:02	pH = 2

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: [none]

Sample ID: [1805005-21](#) Sampled: [Apr-30-18 15:27](#) Matrix: [Water](#)

Sample Name: [C1b](#) Sample Location/Comments: [2nd Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 15:27	pH = 2
Anions by IC	28	May-28-18 15:27	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 15:27	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 15:27	pH = 2
Solids, TDS	7	May-07-18 15:27	pH = 5
TKN DA	28	May-28-18 15:27	pH = 2
TOC	28	May-28-18 15:27	pH = 2
Total Phosphorus DA	28	May-28-18 15:27	pH = 2

Sample ID: [1805005-22](#) Sampled: [Apr-30-18 16:06](#) Matrix: [Water](#)

Sample Name: [C2a](#) Sample Location/Comments: [Nelson Road](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 16:06	pH = 2
Anions by IC	28	May-28-18 16:06	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 16:06	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 16:06	pH = 2
Solids, TDS	7	May-07-18 16:06	pH = 5
TKN DA	28	May-28-18 16:06	pH = 2
TOC	28	May-28-18 16:06	pH = 2
Total Phosphorus DA	28	May-28-18 16:06	pH = 2

Sample ID: [1805005-23](#) Sampled: [Apr-30-18 16:14](#) Matrix: [Water](#)

Sample Name: [C2b](#) Sample Location/Comments: [Nelson Road](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 16:14	pH = 2
Anions by IC	28	May-28-18 16:14	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 16:14	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 16:14	pH = 2
Solids, TDS	7	May-07-18 16:14	pH = 5
TKN DA	28	May-28-18 16:14	pH = 2
TOC	28	May-28-18 16:14	pH = 2

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: [none]

Sample ID: [1805005-23](#)      Sampled: [Apr-30-18 16:14](#)      Matrix: [Water](#)

Sample Name: [C2b](#)      Sample Location/Comments: [Nelson Road](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-28-18 16:14	pH = 2

Sample ID: [1805005-24](#)      Sampled: [Apr-30-18 14:16](#)      Matrix: [Water](#)

Sample Name: [C3a](#)      Sample Location/Comments: [3rd Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 14:16	pH = 2
Anions by IC	28	May-28-18 14:16	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 14:16	pH = 3
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 14:16	pH = 2
Solids, TDS	7	May-07-18 14:16	pH = 5
TKN DA	28	May-28-18 14:16	pH = 2
TOC	28	May-28-18 14:16	pH = 2
Total Phosphorus DA	28	May-28-18 14:16	pH = 2

Sample ID: [1805005-25](#)      Sampled: [Apr-30-18 14:26](#)      Matrix: [Water](#)

Sample Name: [C3b](#)      Sample Location/Comments: [3rd Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 14:26	pH = 2
Anions by IC	28	May-28-18 14:26	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 14:26	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 14:26	pH = 2
Solids, TDS	7	May-07-18 14:26	pH = 5
TKN DA	28	May-28-18 14:26	pH = 2
TOC	28	May-28-18 14:26	pH = 2
Total Phosphorus DA	28	May-28-18 14:26	pH = 2

Sample ID: [1805005-26](#)      Sampled: [May-01-18 06:29](#)      Matrix: [Water](#)

Sample Name: [C5Aa](#)      Sample Location/Comments: [CR G \(Nelson Road\)](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 06:29	pH = 2
Anions by IC	28	May-29-18 06:29	pH = 5

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: [none]

Sample ID: [1805005-26](#) Sampled: [May-01-18 06:29](#) Matrix: [Water](#)

Sample Name: [C5Aa](#) Sample Location/Comments: [CR G \(Nelson Road\)](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-28-18 06:29	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 06:29	pH = 2
Solids, TDS	7	May-08-18 06:29	pH = 5
TKN DA	28	May-29-18 06:29	pH = 2
TOC	28	May-29-18 06:29	pH = 2
Total Phosphorus DA	28	May-29-18 06:29	pH = 2

Sample ID: [1805005-27](#) Sampled: [May-01-18 06:43](#) Matrix: [Water](#)

Sample Name: [C5Ab](#) Sample Location/Comments: [CR G \(Nelson Road\)](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 06:43	pH = 2
Anions by IC	28	May-29-18 06:43	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 06:43	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 06:43	pH = 2
Solids, TDS	7	May-08-18 06:43	pH = 5
TKN DA	28	May-29-18 06:43	pH = 2
TOC	28	May-29-18 06:43	pH = 2
Total Phosphorus DA	28	May-29-18 06:43	pH = 2

Sample ID: [1805005-28](#) Sampled: [May-01-18 07:06](#) Matrix: [Water](#)

Sample Name: [C6a](#) Sample Location/Comments: [CR G \(Nelson Road\)](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 07:06	pH = 2
Anions by IC	28	May-29-18 07:06	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 07:06	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 07:06	pH = 2
Solids, TDS	7	May-08-18 07:06	pH = 6
TKN DA	28	May-29-18 07:06	pH = 2
TOC	28	May-29-18 07:06	pH = 2
Total Phosphorus DA	28	May-29-18 07:06	pH = 2

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: [none]

Sample ID: [1805005-29](#) Sampled: [May-01-18 07:15](#) Matrix: [Water](#)

Sample Name: [C6b](#) Sample Location/Comments: [CR G \(Nelson Road\)](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 07:15	pH = 3
Anions by IC	28	May-29-18 07:15	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 07:15	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 07:15	pH = 3
Solids, TDS	7	May-08-18 07:15	pH = 5
TKN DA	28	May-29-18 07:15	pH = 3
TOC	28	May-29-18 07:15	pH = 3
Total Phosphorus DA	28	May-29-18 07:15	pH = 3

Sample ID: [1805005-30](#) Sampled: [May-01-18 07:48](#) Matrix: [Water](#)

Sample Name: [C7a](#) Sample Location/Comments: [4th Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 07:48	pH = 2
Anions by IC	28	May-29-18 07:48	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 07:48	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 07:48	pH = 2
Solids, TDS	7	May-08-18 07:48	pH = 6
TKN DA	28	May-29-18 07:48	pH = 2
TOC	28	May-29-18 07:48	pH = 2
Total Phosphorus DA	28	May-29-18 07:48	pH = 2

Sample ID: [1805005-31](#) Sampled: [May-01-18 08:02](#) Matrix: [Water](#)

Sample Name: [C7b](#) Sample Location/Comments: [4th Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 08:02	pH = 2
Anions by IC	28	May-29-18 08:02	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 08:02	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 08:02	pH = 2
Solids, TDS	7	May-08-18 08:02	pH = 5
TKN DA	28	May-29-18 08:02	pH = 2
TOC	28	May-29-18 08:02	pH = 2

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: [none]

Sample ID: [1805005-31](#)      Sampled: [May-01-18 08:02](#)      Matrix: [Water](#)

Sample Name: [C7b](#)      Sample Location/Comments: [4th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-29-18 08:02	pH = 2

Sample ID: [1805005-32](#)      Sampled: [May-01-18 07:39](#)      Matrix: [Water](#)

Sample Name: [FB2](#)      Sample Location/Comments: [4th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 07:39	pH = 2
Anions by IC	28	May-29-18 07:39	pH = 4
Metals ICP-AES (w)	180	Oct-28-18 07:39	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 07:39	pH = 2
Solids, TDS	7	May-08-18 07:39	pH = 4
TKN DA	28	May-29-18 07:39	pH = 2
TOC	28	May-29-18 07:39	pH = 2
Total Phosphorus DA	28	May-29-18 07:39	pH = 2

Sample ID: [1805005-33](#)      Sampled: [May-01-18 07:38](#)      Matrix: [Water](#)

Sample Name: [C7 equip](#)      Sample Location/Comments: [4th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 07:38	pH = 2
Anions by IC	28	May-29-18 07:38	pH = 4
Metals ICP-AES (w)	180	Oct-28-18 07:38	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 07:38	pH = 2
Solids, TDS	7	May-08-18 07:38	pH = 4
TKN DA	28	May-29-18 07:38	pH = 2
TOC	28	May-29-18 07:38	pH = 2
Total Phosphorus DA	28	May-29-18 07:38	pH = 2

Sample ID: [1805005-34](#)      Sampled: [May-01-18 08:02](#)      Matrix: [Water](#)

Sample Name: [C7 Dup](#)      Sample Location/Comments: [4th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 08:02	pH = 2
Anions by IC	28	May-29-18 08:02	pH = 5

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: [none]

Sample ID: [1805005-34](#) Sampled: [May-01-18 08:02](#) Matrix: [Water](#)

Sample Name: [C7 Dup](#) Sample Location/Comments: [4th Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-28-18 08:02	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 08:02	pH = 2
Solids, TDS	7	May-08-18 08:02	pH = 5
TKN DA	28	May-29-18 08:02	pH = 2
TOC	28	May-29-18 08:02	pH = 2
Total Phosphorus DA	28	May-29-18 08:02	pH = 2

Sample ID: [1805005-35](#) Sampled: [May-01-18 08:35](#) Matrix: [Water](#)

Sample Name: [C8a](#) Sample Location/Comments: [4th Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 08:35	pH = 2
Anions by IC	28	May-29-18 08:35	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 08:35	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 08:35	pH = 2
Solids, TDS	7	May-08-18 08:35	pH = 5
TKN DA	28	May-29-18 08:35	pH = 2
TOC	28	May-29-18 08:35	pH = 2
Total Phosphorus DA	28	May-29-18 08:35	pH = 2

Sample ID: [1805005-36](#) Sampled: [May-01-18 08:42](#) Matrix: [Water](#)

Sample Name: [C8b](#) Sample Location/Comments: [4th Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 08:42	pH = 2
Anions by IC	28	May-29-18 08:42	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 08:42	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 08:42	pH = 2
Solids, TDS	7	May-08-18 08:42	pH = 5
TKN DA	28	May-29-18 08:42	pH = 2
TOC	28	May-29-18 08:42	pH = 2
Total Phosphorus DA	28	May-29-18 08:42	pH = 2

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: [none]

Sample ID: [1805005-37](#) Sampled: [May-01-18 10:00](#) Matrix: [Water](#)

Sample Name: [C9a](#) Sample Location/Comments: [4th Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 10:00	pH = 2
Anions by IC	28	May-29-18 10:00	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 10:00	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 10:00	pH = 2
Solids, TDS	7	May-08-18 10:00	pH = 5
TKN DA	28	May-29-18 10:00	pH = 2
TOC	28	May-29-18 10:00	pH = 2
Total Phosphorus DA	28	May-29-18 10:00	pH = 2

Sample ID: [1805005-38](#) Sampled: [May-01-18 10:21](#) Matrix: [Water](#)

Sample Name: [C9b](#) Sample Location/Comments: [4th Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 10:21	pH = 2
Anions by IC	28	May-29-18 10:21	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 10:21	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 10:21	pH = 2
Solids, TDS	7	May-08-18 10:21	pH = 5
TKN DA	28	May-29-18 10:21	pH = 2
TOC	28	May-29-18 10:21	pH = 2
Total Phosphorus DA	28	May-29-18 10:21	pH = 2

Sample ID: [1805005-39](#) Sampled: [May-01-18 11:05](#) Matrix: [Water](#)

Sample Name: [C10a](#) Sample Location/Comments: [4th Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 11:05	pH = 2
Anions by IC	28	May-29-18 11:05	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 11:05	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 11:05	pH = 2
Solids, TDS	7	May-08-18 11:05	pH = 6
TKN DA	28	May-29-18 11:05	pH = 2
TOC	28	May-29-18 11:05	pH = 2

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: [none]

Sample ID: [1805005-39](#) Sampled: [May-01-18 11:05](#) Matrix: [Water](#)

Sample Name: [C10a](#) Sample Location/Comments: [4th Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-29-18 11:05	pH = 2

Sample ID: [1805005-40](#) Sampled: [May-01-18 11:12](#) Matrix: [Water](#)

Sample Name: [C10b](#) Sample Location/Comments: [4th Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 11:12	pH = 2
Anions by IC	28	May-29-18 11:12	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 11:12	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 11:12	pH = 2
Solids, TDS	7	May-08-18 11:12	pH = 5
TKN DA	28	May-29-18 11:12	pH = 2
TOC	28	May-29-18 11:12	pH = 2
Total Phosphorus DA	28	May-29-18 11:12	pH = 2

Sample ID: [1805005-41](#) Sampled: [May-01-18 11:46](#) Matrix: [Water](#)

Sample Name: [C11a](#) Sample Location/Comments: [20th Avenue](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 11:46	pH = 3
Anions by IC	28	May-29-18 11:46	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 11:46	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 11:46	pH = 3
Solids, TDS	7	May-08-18 11:46	pH = 6
TKN DA	28	May-29-18 11:46	pH = 3
TOC	28	May-29-18 11:46	pH = 3
Total Phosphorus DA	28	May-29-18 11:46	pH = 3

Sample ID: [1805005-42](#) Sampled: [May-01-18 11:52](#) Matrix: [Water](#)

Sample Name: [C11b](#) Sample Location/Comments: [20th Avenue](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 11:52	pH = 2
Anions by IC	28	May-29-18 11:52	pH = 5

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: [none]

Sample ID: [1805005-42](#) Sampled: [May-01-18 11:52](#) Matrix: [Water](#)

Sample Name: [C11b](#) Sample Location/Comments: [20th Avenue](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-28-18 11:52	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 11:52	pH = 2
Solids, TDS	7	May-08-18 11:52	pH = 5
TKN DA	28	May-29-18 11:52	pH = 2
TOC	28	May-29-18 11:52	pH = 2
Total Phosphorus DA	28	May-29-18 11:52	pH = 2

Sample ID: [1805005-43](#) Sampled: [May-01-18 12:41](#) Matrix: [Water](#)

Sample Name: [C12a](#) Sample Location/Comments: [19th Avenue](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 12:41	pH = 2
Anions by IC	28	May-29-18 12:41	pH = 7
Metals ICP-AES (w)	180	Oct-28-18 12:41	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 12:41	pH = 2
Solids, TDS	7	May-08-18 12:41	pH = 7
TKN DA	28	May-29-18 12:41	pH = 2
TOC	28	May-29-18 12:41	pH = 2
Total Phosphorus DA	28	May-29-18 12:41	pH = 2

Sample ID: [1805005-44](#) Sampled: [May-01-18 12:47](#) Matrix: [Water](#)

Sample Name: [C12b](#) Sample Location/Comments: [19th Avenue](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 12:47	pH = 2
Anions by IC	28	May-29-18 12:47	pH = 7
Metals ICP-AES (w)	180	Oct-28-18 12:47	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 12:47	pH = 2
Solids, TDS	7	May-08-18 12:47	pH = 7
TKN DA	28	May-29-18 12:47	pH = 2
TOC	28	May-29-18 12:47	pH = 2
Total Phosphorus DA	28	May-29-18 12:47	pH = 2

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: [none]

Sample ID: [1805005-45](#) Sampled: [May-01-18 13:30](#) Matrix: [Water](#)

Sample Name: [C13a](#)

Sample Location/Comments: [4th Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 13:30	pH = 3
Anions by IC	28	May-29-18 13:30	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 13:30	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 13:30	pH = 3
Solids, TDS	7	May-08-18 13:30	pH = 6
TKN DA	28	May-29-18 13:30	pH = 3
TOC	28	May-29-18 13:30	pH = 3
Total Phosphorus DA	28	May-29-18 13:30	pH = 3

Sample ID: [1805005-46](#) Sampled: [May-01-18 13:39](#) Matrix: [Water](#)

Sample Name: [C13b](#)

Sample Location/Comments: [4th Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 13:39	pH = 2
Anions by IC	28	May-29-18 13:39	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 13:39	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 13:39	pH = 2
Solids, TDS	7	May-08-18 13:39	pH = 5
TKN DA	28	May-29-18 13:39	pH = 2
TOC	28	May-29-18 13:39	pH = 2
Total Phosphorus DA	28	May-29-18 13:39	pH = 2

Sample ID: [1805005-47](#) Sampled: [May-01-18 14:19](#) Matrix: [Water](#)

Sample Name: [D1a](#)

Sample Location/Comments: [5th Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 14:19	pH = 2
Anions by IC	28	May-29-18 14:19	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 14:19	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 14:19	pH = 2
Solids, TDS	7	May-08-18 14:19	pH = 6
TKN DA	28	May-29-18 14:19	pH = 2
TOC	28	May-29-18 14:19	pH = 2

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: [none]

Sample ID: [1805005-47](#) Sampled: [May-01-18 14:19](#) Matrix: [Water](#)

Sample Name: [D1a](#) Sample Location/Comments: [5th Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-29-18 14:19	pH = 2

Sample ID: [1805005-48](#) Sampled: [May-01-18 14:26](#) Matrix: [Water](#)

Sample Name: [D1b](#) Sample Location/Comments: [5th Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 14:26	pH = 3
Anions by IC	28	May-29-18 14:26	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 14:26	pH = 3
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 14:26	pH = 3
Solids, TDS	7	May-08-18 14:26	pH = 5
TKN DA	28	May-29-18 14:26	pH = 3
TOC	28	May-29-18 14:26	pH = 3
Total Phosphorus DA	28	May-29-18 14:26	pH = 3

Sample ID: [1805005-49](#) Sampled: [May-01-18 15:00](#) Matrix: [Water](#)

Sample Name: [D2a](#) Sample Location/Comments: [5th Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 15:00	pH = 3
Anions by IC	28	May-29-18 15:00	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 15:00	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 15:00	pH = 3
Solids, TDS	7	May-08-18 15:00	pH = 6
TKN DA	28	May-29-18 15:00	pH = 3
TOC	28	May-29-18 15:00	pH = 3
Total Phosphorus DA	28	May-29-18 15:00	pH = 3

Sample ID: [1805005-50](#) Sampled: [May-01-18 15:06](#) Matrix: [Water](#)

Sample Name: [D2b](#) Sample Location/Comments: [5th Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 15:06	pH = 2
Anions by IC	28	May-29-18 15:06	pH = 6

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: [none]

Sample ID: [1805005-50](#) Sampled: [May-01-18 15:06](#) Matrix: [Water](#)

Sample Name: [D2b](#) Sample Location/Comments: [5th Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-28-18 15:06	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 15:06	pH = 2
Solids, TDS	7	May-08-18 15:06	pH = 6
TKN DA	28	May-29-18 15:06	pH = 2
TOC	28	May-29-18 15:06	pH = 2
Total Phosphorus DA	28	May-29-18 15:06	pH = 2

Sample ID: [1805005-51](#) Sampled: [May-01-18 15:41](#) Matrix: [Water](#)

Sample Name: [D3a](#) Sample Location/Comments: [5th Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 15:41	pH = 2
Anions by IC	28	May-29-18 15:41	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 15:41	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 15:41	pH = 2
Solids, TDS	7	May-08-18 15:41	pH = 6
TKN DA	28	May-29-18 15:41	pH = 2
TOC	28	May-29-18 15:41	pH = 2
Total Phosphorus DA	28	May-29-18 15:41	pH = 2

Sample ID: [1805005-52](#) Sampled: [May-01-18 15:48](#) Matrix: [Water](#)

Sample Name: [D3b](#) Sample Location/Comments: [5th Street](#)

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 15:48	pH = 2
Anions by IC	28	May-29-18 15:48	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 15:48	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 15:48	pH = 2
Solids, TDS	7	May-08-18 15:48	pH = 5
TKN DA	28	May-29-18 15:48	pH = 2
TOC	28	May-29-18 15:48	pH = 2
Total Phosphorus DA	28	May-29-18 15:48	pH = 2

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
 Project: Central Sands

Project Manager: Angela Ockrassa Davis  
 Project Number: [none]

Sample ID: [1805005-53](#)      Sampled: [May-01-18 16:19](#)      Matrix: [Water](#)

Sample Name: [D4a](#)      Sample Location/Comments: [5th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 16:19	pH = 2
Anions by IC	28	May-29-18 16:19	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 16:19	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 16:19	pH = 2
Solids, TDS	7	May-08-18 16:19	pH = 6
TKN DA	28	May-29-18 16:19	pH = 2
TOC	28	May-29-18 16:19	pH = 2
Total Phosphorus DA	28	May-29-18 16:19	pH = 2

Sample ID: [1805005-54](#)      Sampled: [May-01-18 16:26](#)      Matrix: [Water](#)

Sample Name: [D4b](#)      Sample Location/Comments: [5th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 16:26	pH = 2
Anions by IC	28	May-29-18 16:26	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 16:26	pH = 3
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 16:26	pH = 2
Solids, TDS	7	May-08-18 16:26	pH = 5
TKN DA	28	May-29-18 16:26	pH = 2
TOC	28	May-29-18 16:26	pH = 2
Total Phosphorus DA	28	May-29-18 16:26	pH = 2

WORK ORDER MEMO: NCR 14118

PROJECT COMMENTS: Anions: Chloride, fluoride, bromide, sulfate.  
 Full List metals

**REVIEWED**  
 By *Amanda Wroble* at 3:35 pm, May 03, 2018

Reviewed By \_\_\_\_\_ Date \_\_\_\_\_



**Environmental Protection Agency Region 5**  
**Chicago Regional Laboratory**

536 South Clark Street, Chicago, IL 60605  
 Phone:(312)353-8370 Fax:(312)886-2591

**WORK ORDER**

Printed: 5/7/2018 9:53:28AM

**1805007**

**US EPA Region 5 Chicago Regional Laboratory**

<b>Client:</b> Water Division, WECA Region 5	<b>Project Manager:</b> Angela Ockrassa Davis
<b>Project:</b> Central Sands	<b>Project Number:</b> CB022018

<b>Report To:</b>		
Cheryl Burdett	77 West Jackson Boulevard	Phone: (312) 886-1463
Water Division, WECA Region 5	Chicago, IL 60604	Fax: (312) 886-2001

Date Due:	Jun-04-18 15:00 (30 day TAT)	Date Received:	May-04-18 10:00
Received By:	Robert Snyder	Date Logged In:	May-07-18 07:38
Logged In By:	Robert Snyder		

Samples Received at:		<b>Work Order Comments:</b>
Sample tags/labels	Yes	Copy/Relog from 1805005. Anions: Chloride and nitrate as NO3
Seals Intact	Yes	Full List metals
Received on ice	Yes	pH paper used in SC 16H2601
Paperwork Included	Yes	

**Sample ID:** [1805007-01](#)      **Sampled:** [May-02-18 06:38](#)      **Matrix:** [Water](#)  
**Sample Name:** [D5a](#)      **Sample Location/Comments:** [5th Street](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 06:38	pH = 1
Anions by IC	28	May-30-18 06:38	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 06:38	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 06:38	pH = 1
Solids, TDS	7	May-09-18 06:38	pH = 6
TKN DA	28	May-30-18 06:38	pH = 1
TOC	28	May-30-18 06:38	pH = 1
Total Phosphorus DA	28	May-30-18 06:38	pH = 1

**Sample ID:** [1805007-02](#)      **Sampled:** [May-02-18 06:46](#)      **Matrix:** [Water](#)  
**Sample Name:** [D5b](#)      **Sample Location/Comments:** [5th Street](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 06:46	pH = 1
Anions by IC	28	May-30-18 06:46	pH = 5
Metals ICP-AES (w)	180	Oct-29-18 06:46	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 06:46	pH = 1

**1805007**

**US EPA Region 5 Chicago Regional Laboratory**

**Client:** Water Division, WECA Region 5  
**Project:** Central Sands

**Project Manager:** Angela Ockrassa Davis  
**Project Number:** CB022018

**Sample ID:** [1805007-02](#)      **Sampled:** [May-02-18 06:46](#)      **Matrix:** [Water](#)

**Sample Name:** [D5b](#)      **Sample Location/Comments:** [5th Street](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Solids, TDS	7	May-09-18 06:46	pH = 5
TKN DA	28	May-30-18 06:46	pH = 1
TOC	28	May-30-18 06:46	pH = 1
Total Phosphorus DA	28	May-30-18 06:46	pH = 1

**Sample ID:** [1805007-03](#)      **Sampled:** [May-02-18 07:17](#)      **Matrix:** [Water](#)

**Sample Name:** [D6a](#)      **Sample Location/Comments:** [5th Street](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 07:17	pH = 1
Anions by IC	28	May-30-18 07:17	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 07:17	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 07:17	pH = 1
Solids, TDS	7	May-09-18 07:17	pH = 6
TKN DA	28	May-30-18 07:17	pH = 1
TOC	28	May-30-18 07:17	pH = 1
Total Phosphorus DA	28	May-30-18 07:17	pH = 1

**Sample ID:** [1805007-04](#)      **Sampled:** [May-02-18 07:29](#)      **Matrix:** [Water](#)

**Sample Name:** [D6b](#)      **Sample Location/Comments:** [5th Street](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 07:29	pH = 1
Anions by IC	28	May-30-18 07:29	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 07:29	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 07:29	pH = 1
Solids, TDS	7	May-09-18 07:29	pH = 6
TKN DA	28	May-30-18 07:29	pH = 1
TOC	28	May-30-18 07:29	pH = 1
Total Phosphorus DA	28	May-30-18 07:29	pH = 1

1805007

**US EPA Region 5 Chicago Regional Laboratory**

**Client:** Water Division, WECA Region 5  
**Project:** Central Sands

**Project Manager:** Angela Ockrassa Davis  
**Project Number:** CB022018

**Sample ID:** [1805007-05](#)      **Sampled:** [May-02-18 08:01](#)      **Matrix:** [Water](#)

**Sample Name:** [D7 equip](#)      **Sample Location/Comments:** [23rd Avenue](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 08:01	pH = 1
Anions by IC	28	May-30-18 08:01	pH = 5
Metals ICP-AES (w)	180	Oct-29-18 08:01	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 08:01	pH = 1
Solids, TDS	7	May-09-18 08:01	pH = 5
TKN DA	28	May-30-18 08:01	pH = 1
TOC	28	May-30-18 08:01	pH = 1
Total Phosphorus DA	28	May-30-18 08:01	pH = 1

**Sample ID:** [1805007-06](#)      **Sampled:** [May-02-18 08:03](#)      **Matrix:** [Water](#)

**Sample Name:** [FB3](#)      **Sample Location/Comments:** [23rd Avenue](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 08:03	pH = 1
Anions by IC	28	May-30-18 08:03	pH = 4
Metals ICP-AES (w)	180	Oct-29-18 08:03	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 08:03	pH = 1
Solids, TDS	7	May-09-18 08:03	pH = 4
TKN DA	28	May-30-18 08:03	pH = 1
TOC	28	May-30-18 08:03	pH = 1
Total Phosphorus DA	28	May-30-18 08:03	pH = 1

**Sample ID:** [1805007-07](#)      **Sampled:** [May-02-18 08:12](#)      **Matrix:** [Water](#)

**Sample Name:** [D7a Dup](#)      **Sample Location/Comments:** [23rd Avenue](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 08:12	pH = 1
Anions by IC	28	May-30-18 08:12	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 08:12	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 08:12	pH = 1
Solids, TDS	7	May-09-18 08:12	pH = 6
TKN DA	28	May-30-18 08:12	pH = 1
TOC	28	May-30-18 08:12	pH = 1

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
 Project: Central Sands

Project Manager: Angela Ockrassa Davis  
 Project Number: CB022018

Sample ID: [1805007-07](#)      Sampled: [May-02-18 08:12](#)      Matrix: [Water](#)

Sample Name: [D7a Dup](#)      Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-30-18 08:12	pH = 1

Sample ID: [1805007-08](#)      Sampled: [May-02-18 08:12](#)      Matrix: [Water](#)      [QC Source Sample MS/MSD](#)

Sample Name: [D7a](#)      Sample Location/Comments: [23rd Avenue](#)

Sample Comments: [MS/MSD](#)

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 08:12	pH = 1
Anions by IC	28	May-30-18 08:12	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 08:12	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 08:12	pH = 1
Solids, TDS	7	May-09-18 08:12	pH = 6
TKN DA	28	May-30-18 08:12	pH = 1
TOC	28	May-30-18 08:12	pH = 1
Total Phosphorus DA	28	May-30-18 08:12	pH = 1

Sample ID: [1805007-09](#)      Sampled: [May-02-18 08:19](#)      Matrix: [Water](#)

Sample Name: [D7b](#)      Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 08:19	pH = 1
Anions by IC	28	May-30-18 08:19	pH = 5
Metals ICP-AES (w)	180	Oct-29-18 08:19	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 08:19	pH = 1
Solids, TDS	7	May-09-18 08:19	pH = 5
TKN DA	28	May-30-18 08:19	pH = 1
TOC	28	May-30-18 08:19	pH = 1
Total Phosphorus DA	28	May-30-18 08:19	pH = 1

Sample ID: [1805007-10](#)      Sampled: [May-02-18 08:55](#)      Matrix: [Water](#)

Sample Name: [D8a](#)      Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 08:55	pH = 1
Anions by IC	28	May-30-18 08:55	pH = 6

**1805007**

**US EPA Region 5 Chicago Regional Laboratory**

**Client:** Water Division, WECA Region 5  
**Project:** Central Sands

**Project Manager:** Angela Ockrassa Davis  
**Project Number:** CB022018

**Sample ID:** [1805007-10](#)      **Sampled:** [May-02-18 08:55](#)      **Matrix:** [Water](#)

**Sample Name:** [D8a](#)      **Sample Location/Comments:** [23rd Avenue](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-29-18 08:55	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 08:55	pH = 1
Solids, TDS	7	May-09-18 08:55	pH = 6
TKN DA	28	May-30-18 08:55	pH = 1
TOC	28	May-30-18 08:55	pH = 1
Total Phosphorus DA	28	May-30-18 08:55	pH = 1

**Sample ID:** [1805007-11](#)      **Sampled:** [May-02-18 09:11](#)      **Matrix:** [Water](#)

**Sample Name:** [D8b](#)      **Sample Location/Comments:** [23rd Avenue](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 09:11	pH = 1
Anions by IC	28	May-30-18 09:11	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 09:11	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 09:11	pH = 1
Solids, TDS	7	May-09-18 09:11	pH = 6
TKN DA	28	May-30-18 09:11	pH = 1
TOC	28	May-30-18 09:11	pH = 1
Total Phosphorus DA	28	May-30-18 09:11	pH = 1

**Sample ID:** [1805007-12](#)      **Sampled:** [May-02-18 09:45](#)      **Matrix:** [Water](#)

**Sample Name:** [D9a](#)      **Sample Location/Comments:** [23rd Avenue](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 09:45	pH = 1
Anions by IC	28	May-30-18 09:45	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 09:45	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 09:45	pH = 1
Solids, TDS	7	May-09-18 09:45	pH = 6
TKN DA	28	May-30-18 09:45	pH = 1
TOC	28	May-30-18 09:45	pH = 1
Total Phosphorus DA	28	May-30-18 09:45	pH = 1

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
 Project: Central Sands

Project Manager: Angela Ockrassa Davis  
 Project Number: CB022018

Sample ID: [1805007-13](#)      Sampled: [May-02-18 09:54](#)      Matrix: [Water](#)

Sample Name: [D9b](#)      Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 09:54	pH = 1
Anions by IC	28	May-30-18 09:54	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 09:54	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 09:54	pH = 1
Solids, TDS	7	May-09-18 09:54	pH = 6
TKN DA	28	May-30-18 09:54	pH = 1
TOC	28	May-30-18 09:54	pH = 1
Total Phosphorus DA	28	May-30-18 09:54	pH = 1

Sample ID: [1805007-14](#)      Sampled: [May-02-18 10:29](#)      Matrix: [Water](#)

Sample Name: [D10a](#)      Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 10:29	pH = 1
Anions by IC	28	May-30-18 10:29	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 10:29	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 10:29	pH = 1
Solids, TDS	7	May-09-18 10:29	pH = 6
TKN DA	28	May-30-18 10:29	pH = 1
TOC	28	May-30-18 10:29	pH = 1
Total Phosphorus DA	28	May-30-18 10:29	pH = 1

Sample ID: [1805007-15](#)      Sampled: [May-02-18 10:29](#)      Matrix: [Water](#)

Sample Name: [D10a Dup](#)      Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 10:29	pH = 1
Anions by IC	28	May-30-18 10:29	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 10:29	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 10:29	pH = 1
Solids, TDS	7	May-09-18 10:29	pH = 6
TKN DA	28	May-30-18 10:29	pH = 1
TOC	28	May-30-18 10:29	pH = 1

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
 Project: Central Sands

Project Manager: Angela Ockrassa Davis  
 Project Number: CB022018

Sample ID: [1805007-15](#)      Sampled: [May-02-18 10:29](#)      Matrix: [Water](#)

Sample Name: [D10a Dup](#)      Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-30-18 10:29	pH = 1

Sample ID: [1805007-16](#)      Sampled: [May-02-18 10:41](#)      Matrix: [Water](#)

Sample Name: [D10b](#)      Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 10:41	pH = 1
Anions by IC	28	May-30-18 10:41	pH = 5
Metals ICP-AES (w)	180	Oct-29-18 10:41	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 10:41	pH = 1
Solids, TDS	7	May-09-18 10:41	pH = 5
TKN DA	28	May-30-18 10:41	pH = 1
TOC	28	May-30-18 10:41	pH = 1
Total Phosphorus DA	28	May-30-18 10:41	pH = 1

Sample ID: [1805007-17](#)      Sampled: [May-02-18 10:41](#)      Matrix: [Water](#)

Sample Name: [D10b Dup](#)      Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 10:41	pH = 1
Anions by IC	28	May-30-18 10:41	pH = 5
Metals ICP-AES (w)	180	Oct-29-18 10:41	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 10:41	pH = 1
Solids, TDS	7	May-09-18 10:41	pH = 5
TKN DA	28	May-30-18 10:41	pH = 1
TOC	28	May-30-18 10:41	pH = 1
Total Phosphorus DA	28	May-30-18 10:41	pH = 1

Sample ID: [1805007-18](#)      Sampled: [May-02-18 11:19](#)      Matrix: [Water](#)

Sample Name: [D11a](#)      Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 11:19	pH = 1
Anions by IC	28	May-30-18 11:19	pH = 6

1805007

**US EPA Region 5 Chicago Regional Laboratory**

<b>Client:</b> Water Division, WECA Region 5	<b>Project Manager:</b> Angela Ockrassa Davis
<b>Project:</b> Central Sands	<b>Project Number:</b> CB022018

**Sample ID:** [1805007-18](#)      **Sampled:** [May-02-18 11:19](#)      **Matrix:** [Water](#)

**Sample Name:** [D11a](#)      **Sample Location/Comments:** [23rd Avenue](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-29-18 11:19	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 11:19	pH = 1
Solids, TDS	7	May-09-18 11:19	pH = 6
TKN DA	28	May-30-18 11:19	pH = 1
TOC	28	May-30-18 11:19	pH = 1
Total Phosphorus DA	28	May-30-18 11:19	pH = 1

**Sample ID:** [1805007-19](#)      **Sampled:** [May-02-18 11:42](#)      **Matrix:** [Water](#)

**Sample Name:** [D11b](#)      **Sample Location/Comments:** [23rd Avenue](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 11:42	pH = 1
Anions by IC	28	May-30-18 11:42	pH = 5
Metals ICP-AES (w)	180	Oct-29-18 11:42	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 11:42	pH = 1
Solids, TDS	7	May-09-18 11:42	pH = 5
TKN DA	28	May-30-18 11:42	pH = 1
TOC	28	May-30-18 11:42	pH = 1
Total Phosphorus DA	28	May-30-18 11:42	pH = 1

**Sample ID:** [1805007-20](#)      **Sampled:** [May-02-18 12:41](#)      **Matrix:** [Water](#)

**Sample Name:** [E1a](#)      **Sample Location/Comments:** [23rd Avenue](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 12:41	pH = 1
Anions by IC	28	May-30-18 12:41	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 12:41	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 12:41	pH = 1
Solids, TDS	7	May-09-18 12:41	pH = 6
TKN DA	28	May-30-18 12:41	pH = 1
TOC	28	May-30-18 12:41	pH = 1
Total Phosphorus DA	28	May-30-18 12:41	pH = 1

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
 Project: Central Sands

Project Manager: Angela Ockrassa Davis  
 Project Number: CB022018

Sample ID: [1805007-21](#)      Sampled: [May-02-18 12:58](#)      Matrix: [Water](#)

Sample Name: [E1b](#)      Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 12:58	pH = 1
Anions by IC	28	May-30-18 12:58	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 12:58	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 12:58	pH = 1
Solids, TDS	7	May-09-18 12:58	pH = 6
TKN DA	28	May-30-18 12:58	pH = 1
TOC	28	May-30-18 12:58	pH = 1
Total Phosphorus DA	28	May-30-18 12:58	pH = 1

Sample ID: [1805007-22](#)      Sampled: [May-02-18 13:28](#)      Matrix: [Water](#)

Sample Name: [E2a](#)      Sample Location/Comments: [Porter Road](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 13:28	pH = 1
Anions by IC	28	May-30-18 13:28	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 13:28	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 13:28	pH = 1
Solids, TDS	7	May-09-18 13:28	pH = 6
TKN DA	28	May-30-18 13:28	pH = 1
TOC	28	May-30-18 13:28	pH = 1
Total Phosphorus DA	28	May-30-18 13:28	pH = 1

Sample ID: [1805007-23](#)      Sampled: [May-02-18 13:37](#)      Matrix: [Water](#)

Sample Name: [E2b](#)      Sample Location/Comments: [Porter Road](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 13:37	pH = 1
Anions by IC	28	May-30-18 13:37	pH = 5
Metals ICP-AES (w)	180	Oct-29-18 13:37	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 13:37	pH = 1
Solids, TDS	7	May-09-18 13:37	pH = 5
TKN DA	28	May-30-18 13:37	pH = 1
TOC	28	May-30-18 13:37	pH = 1

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: CB022018

Sample ID: [1805007-23](#)      Sampled: [May-02-18 13:37](#)      Matrix: [Water](#)

Sample Name: [E2b](#)      Sample Location/Comments: [Porter Road](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-30-18 13:37	pH = 1

Sample ID: [1805007-24](#)      Sampled: [May-02-18 13:28](#)      Matrix: [Water](#)

Sample Name: [E2a Dup](#)      Sample Location/Comments: [Porter Road](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 13:28	pH = 1
Anions by IC	28	May-30-18 13:28	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 13:28	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 13:28	pH = 1
Solids, TDS	7	May-09-18 13:28	pH = 6
TKN DA	28	May-30-18 13:28	pH = 1
TOC	28	May-30-18 13:28	pH = 1
Total Phosphorus DA	28	May-30-18 13:28	pH = 1

Sample ID: [1805007-25](#)      Sampled: [May-02-18 13:37](#)      Matrix: [Water](#)

Sample Name: [E2b Dup](#)      Sample Location/Comments: [Porter Road](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 13:37	pH = 1
Anions by IC	28	May-30-18 13:37	pH = 5
Metals ICP-AES (w)	180	Oct-29-18 13:37	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 13:37	pH = 1
Solids, TDS	7	May-09-18 13:37	pH = 5
TKN DA	28	May-30-18 13:37	pH = 1
TOC	28	May-30-18 13:37	pH = 1
Total Phosphorus DA	28	May-30-18 13:37	pH = 1

Sample ID: [1805007-26](#)      Sampled: [May-02-18 14:03](#)      Matrix: [Water](#)

Sample Name: [E3a](#)      Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 14:03	pH = 1
Anions by IC	28	May-30-18 14:03	pH = 6

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
 Project: Central Sands

Project Manager: Angela Ockrassa Davis  
 Project Number: CB022018

Sample ID: [1805007-26](#)      Sampled: [May-02-18 14:03](#)      Matrix: [Water](#)

Sample Name: [E3a](#)      Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-29-18 14:03	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 14:03	pH = 1
Solids, TDS	7	May-09-18 14:03	pH = 6
TKN DA	28	May-30-18 14:03	pH = 1
TOC	28	May-30-18 14:03	pH = 1
Total Phosphorus DA	28	May-30-18 14:03	pH = 1

Sample ID: [1805007-27](#)      Sampled: [May-02-18 14:09](#)      Matrix: [Water](#)

Sample Name: [E3b](#)      Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 14:09	pH = 1
Anions by IC	28	May-30-18 14:09	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 14:09	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 14:09	pH = 1
Solids, TDS	7	May-09-18 14:09	pH = 6
TKN DA	28	May-30-18 14:09	pH = 1
TOC	28	May-30-18 14:09	pH = 1
Total Phosphorus DA	28	May-30-18 14:09	pH = 1

Sample ID: [1805007-28](#)      Sampled: [May-02-18 14:37](#)      Matrix: [Water](#)

Sample Name: [E4a](#)      Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 14:37	pH = 1
Anions by IC	28	May-30-18 14:37	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 14:37	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 14:37	pH = 1
Solids, TDS	7	May-09-18 14:37	pH = 6
TKN DA	28	May-30-18 14:37	pH = 1
TOC	28	May-30-18 14:37	pH = 1
Total Phosphorus DA	28	May-30-18 14:37	pH = 1

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
 Project: Central Sands

Project Manager: Angela Ockrassa Davis  
 Project Number: CB022018

Sample ID: [1805007-29](#)      Sampled: [May-02-18 14:43](#)      Matrix: [Water](#)

Sample Name: [E4b](#)      Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 14:43	pH = 1
Anions by IC	28	May-30-18 14:43	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 14:43	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 14:43	pH = 1
Solids, TDS	7	May-09-18 14:43	pH = 6
TKN DA	28	May-30-18 14:43	pH = 1
TOC	28	May-30-18 14:43	pH = 1
Total Phosphorus DA	28	May-30-18 14:43	pH = 1

Sample ID: [1805007-30](#)      Sampled: [May-02-18 15:08](#)      Matrix: [Water](#)

Sample Name: [E5a](#)      Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 15:08	pH = 1
Anions by IC	28	May-30-18 15:08	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 15:08	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 15:08	pH = 1
Solids, TDS	7	May-09-18 15:08	pH = 6
TKN DA	28	May-30-18 15:08	pH = 1
TOC	28	May-30-18 15:08	pH = 1
Total Phosphorus DA	28	May-30-18 15:08	pH = 1

Sample ID: [1805007-31](#)      Sampled: [May-02-18 15:13](#)      Matrix: [Water](#)

Sample Name: [E5b](#)      Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 15:13	pH = 1
Anions by IC	28	May-30-18 15:13	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 15:13	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 15:13	pH = 1
Solids, TDS	7	May-09-18 15:13	pH = 6
TKN DA	28	May-30-18 15:13	pH = 1
TOC	28	May-30-18 15:13	pH = 1

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
 Project: Central Sands

Project Manager: Angela Ockrassa Davis  
 Project Number: CB022018

Sample ID: [1805007-31](#)      Sampled: [May-02-18 15:13](#)      Matrix: [Water](#)

Sample Name: [E5b](#)      Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-30-18 15:13	pH = 1

Sample ID: [1805007-32](#)      Sampled: [May-02-18 15:38](#)      Matrix: [Water](#)

Sample Name: [E6a](#)      Sample Location/Comments: [20th Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 15:38	pH = 1
Anions by IC	28	May-30-18 15:38	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 15:38	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 15:38	pH = 1
Solids, TDS	7	May-09-18 15:38	pH = 6
TKN DA	28	May-30-18 15:38	pH = 1
TOC	28	May-30-18 15:38	pH = 1
Total Phosphorus DA	28	May-30-18 15:38	pH = 1

Sample ID: [1805007-33](#)      Sampled: [May-02-18 15:44](#)      Matrix: [Water](#)

Sample Name: [E6b](#)      Sample Location/Comments: [20th Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 15:44	pH = 1
Anions by IC	28	May-30-18 15:44	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 15:44	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 15:44	pH = 1
Solids, TDS	7	May-09-18 15:44	pH = 6
TKN DA	28	May-30-18 15:44	pH = 1
TOC	28	May-30-18 15:44	pH = 1
Total Phosphorus DA	28	May-30-18 15:44	pH = 1

Sample ID: [1805007-34](#)      Sampled: [May-02-18 16:09](#)      Matrix: [Water](#)

Sample Name: [E7a](#)      Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 16:09	pH = 1
Anions by IC	28	May-30-18 16:09	pH = 5

**1805007**

**US EPA Region 5 Chicago Regional Laboratory**

**Client:** Water Division, WECA Region 5  
**Project:** Central Sands

**Project Manager:** Angela Ockrassa Davis  
**Project Number:** CB022018

**Sample ID:** [1805007-34](#)      **Sampled:** [May-02-18 16:09](#)      **Matrix:** [Water](#)

**Sample Name:** [E7a](#)      **Sample Location/Comments:** [7th Street](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-29-18 16:09	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 16:09	pH = 1
Solids, TDS	7	May-09-18 16:09	pH = 5
TKN DA	28	May-30-18 16:09	pH = 1
TOC	28	May-30-18 16:09	pH = 1
Total Phosphorus DA	28	May-30-18 16:09	pH = 1

**Sample ID:** [1805007-35](#)      **Sampled:** [May-02-18 16:35](#)      **Matrix:** [Water](#)

**Sample Name:** [E7b](#)      **Sample Location/Comments:** [7th Street](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 16:35	pH = 1
Anions by IC	28	May-30-18 16:35	pH = 5
Metals ICP-AES (w)	180	Oct-29-18 16:35	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 16:35	pH = 1
Solids, TDS	7	May-09-18 16:35	pH = 5
TKN DA	28	May-30-18 16:35	pH = 1
TOC	28	May-30-18 16:35	pH = 1
Total Phosphorus DA	28	May-30-18 16:35	pH = 1

**Sample ID:** [1805007-36](#)      **Sampled:** [May-03-18 08:40](#)      **Matrix:** [Water](#)

**Sample Name:** [E8a](#)      **Sample Location/Comments:** [7th Street](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-31-18 08:40	pH = 1
Anions by IC	28	May-31-18 08:40	pH = 5
Metals ICP-AES (w)	180	Oct-30-18 08:40	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-31-18 08:40	pH = 1
Solids, TDS	7	May-10-18 08:40	pH = 5
TKN DA	28	May-31-18 08:40	pH = 1
TOC	28	May-31-18 08:40	pH = 1
Total Phosphorus DA	28	May-31-18 08:40	pH = 1

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
 Project: Central Sands

Project Manager: Angela Ockrassa Davis  
 Project Number: CB022018

Sample ID: [1805007-37](#)      Sampled: [May-03-18 08:48](#)      Matrix: [Water](#)

Sample Name: [E8b](#)      Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-31-18 08:48	pH = 1
Anions by IC	28	May-31-18 08:48	pH = 6
Metals ICP-AES (w)	180	Oct-30-18 08:48	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-31-18 08:48	pH = 1
Solids, TDS	7	May-10-18 08:48	pH = 6
TKN DA	28	May-31-18 08:48	pH = 1
TOC	28	May-31-18 08:48	pH = 1
Total Phosphorus DA	28	May-31-18 08:48	pH = 1

Sample ID: [1805007-38](#)      Sampled: [May-03-18 07:15](#)      Matrix: [Water](#)

Sample Name: [E10a](#)      Sample Location/Comments: [8th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-31-18 07:15	pH = 1
Anions by IC	28	May-31-18 07:15	pH = 6
Metals ICP-AES (w)	180	Oct-30-18 07:15	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-31-18 07:15	pH = 1
Solids, TDS	7	May-10-18 07:15	pH = 6
TKN DA	28	May-31-18 07:15	pH = 1
TOC	28	May-31-18 07:15	pH = 1
Total Phosphorus DA	28	May-31-18 07:15	pH = 1

Sample ID: [1805007-39](#)      Sampled: [May-03-18 07:15](#)      Matrix: [Water](#)

Sample Name: [E10a Dup](#)      Sample Location/Comments: [8th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-31-18 07:15	pH = 1
Anions by IC	28	May-31-18 07:15	pH = 6
Metals ICP-AES (w)	180	Oct-30-18 07:15	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-31-18 07:15	pH = 1
Solids, TDS	7	May-10-18 07:15	pH = 6
TKN DA	28	May-31-18 07:15	pH = 1
TOC	28	May-31-18 07:15	pH = 1

1805007

**US EPA Region 5 Chicago Regional Laboratory**

**Client:** Water Division, WECA Region 5  
**Project:** Central Sands

**Project Manager:** Angela Ockrassa Davis  
**Project Number:** CB022018

**Sample ID:** [1805007-39](#)      **Sampled:** [May-03-18 07:15](#)      **Matrix:** [Water](#)

**Sample Name:** [E10a Dup](#)      **Sample Location/Comments:** [8th Street](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-31-18 07:15	pH = 1

**Sample ID:** [1805007-40](#)      **Sampled:** [May-03-18 07:27](#)      **Matrix:** [Water](#)

**Sample Name:** [E10b](#)      **Sample Location/Comments:** [8th Street](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-31-18 07:27	pH = 1
Anions by IC	28	May-31-18 07:27	pH = 6
Metals ICP-AES (w)	180	Oct-30-18 07:27	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-31-18 07:27	pH = 1
Solids, TDS	7	May-10-18 07:27	pH = 6
TKN DA	28	May-31-18 07:27	pH = 1
TOC	28	May-31-18 07:27	pH = 1
Total Phosphorus DA	28	May-31-18 07:27	pH = 1

**Sample ID:** [1805007-41](#)      **Sampled:** [May-03-18 07:36](#)      **Matrix:** [Water](#)

**Sample Name:** [FB4](#)      **Sample Location/Comments:** [8th Street](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-31-18 07:36	pH = 1
Anions by IC	28	May-31-18 07:36	pH = 4
Metals ICP-AES (w)	180	Oct-30-18 07:36	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-31-18 07:36	pH = 1
Solids, TDS	7	May-10-18 07:36	pH = 4
TKN DA	28	May-31-18 07:36	pH = 1
TOC	28	May-31-18 07:36	pH = 1
Total Phosphorus DA	28	May-31-18 07:36	pH = 1

**Sample ID:** [1805007-42](#)      **Sampled:** [May-03-18 07:13](#)      **Matrix:** [Water](#)

**Sample Name:** [E10 Equip](#)      **Sample Location/Comments:** [8th Street](#)

**Sample Comments:**

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-31-18 07:13	pH = 1
Anions by IC	28	May-31-18 07:13	pH = 4

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: CB022018

Sample ID: [1805007-42](#)      Sampled: [May-03-18 07:13](#)      Matrix: [Water](#)

Sample Name: [E10 Equip](#)      Sample Location/Comments: [8th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-30-18 07:13	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-31-18 07:13	pH = 1
Solids, TDS	7	May-10-18 07:13	pH = 4
TKN DA	28	May-31-18 07:13	pH = 1
TOC	28	May-31-18 07:13	pH = 1
Total Phosphorus DA	28	May-31-18 07:13	pH = 1

Sample ID: [1805007-43](#)      Sampled: [May-03-18 09:53](#)      Matrix: [Water](#)

Sample Name: [E9a](#)      Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-31-18 09:53	pH = 1
Anions by IC	28	May-31-18 09:53	pH = 5
Metals ICP-AES (w)	180	Oct-30-18 09:53	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-31-18 09:53	pH = 1
Solids, TDS	7	May-10-18 09:53	pH = 5
TKN DA	28	May-31-18 09:53	pH = 1
TOC	28	May-31-18 09:53	pH = 1
Total Phosphorus DA	28	May-31-18 09:53	pH = 1

Sample ID: [1805007-44](#)      Sampled: [May-03-18 10:02](#)      Matrix: [Water](#)

Sample Name: [E9b](#)      Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-31-18 10:02	pH = 1
Anions by IC	28	May-31-18 10:02	pH = 5
Metals ICP-AES (w)	180	Oct-30-18 10:02	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-31-18 10:02	pH = 1
Solids, TDS	7	May-10-18 10:02	pH = 5
TKN DA	28	May-31-18 10:02	pH = 1
TOC	28	May-31-18 10:02	pH = 1
Total Phosphorus DA	28	May-31-18 10:02	pH = 1

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5  
Project: Central Sands

Project Manager: Angela Ockrassa Davis  
Project Number: CB022018

PROJECT COMMENTS: Anions: Chloride, fluoride, bromide, sulfate.  
Full List metals

**REVIEWED**  
*By Robert Thompson at 9:54 am, May 07, 2018*



# Environmental Protection Agency Region 5 Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605  
Phone: (312)353-8370 Fax: (312)886-2591

Water Division, WECA Region 5 77 West Jackson Boulevard Chicago IL, 60604	Project: Central Sands Project Number: CB022018 Project Manager: Cheryl Burdett	Reported: Jun-06-18 14:55
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## Dissolved Solids, SM 2540C (modified) US EPA Region 5 Chicago Regional Laboratory

**A1a (1805005-01) Matrix: Water Sampled: Apr-30-18 07:19 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>122</b>	J		20.0	mg/L	1	B18E010	May-07-18	May-15-18

**A1b (1805005-02) Matrix: Water Sampled: Apr-30-18 07:32 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>74.0</b>	J		20.0	mg/L	1	B18E010	May-07-18	May-08-18

**A2a (1805005-03) Matrix: Water Sampled: Apr-30-18 08:15 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>124</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18

**A2b (1805005-04) Matrix: Water Sampled: Apr-30-18 08:24 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>164</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18

**A3a (1805005-05) Matrix: Water Sampled: Apr-30-18 09:06 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>96.0</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18

**A3b (1805005-06) Matrix: Water Sampled: Apr-30-18 09:14 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>76.0</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18

**A4 Equip (1805005-07) Matrix: Water Sampled: Apr-30-18 09:38 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>36.0</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18

**A3a (Dup) (1805005-08) Matrix: Water Sampled: Apr-30-18 09:06 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>92.0</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18



# Environmental Protection Agency Region 5 Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605  
Phone: (312)353-8370 Fax: (312)886-2591

Water Division, WECA Region 5 77 West Jackson Boulevard Chicago IL, 60604	Project: Central Sands Project Number: CB022018 Project Manager: Cheryl Burdett	Reported: Jun-06-18 14:55
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## Dissolved Solids, SM 2540C (modified) US EPA Region 5 Chicago Regional Laboratory

<b>FB1 (1805005-09)</b>	<b>Matrix: Water</b>	<b>Sampled: Apr-30-18 09:49</b>	<b>Received: May-02-18 09:55</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>U</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18

<b>A4a (1805005-10)</b>	<b>Matrix: Water</b>	<b>Sampled: Apr-30-18 09:58</b>	<b>Received: May-02-18 09:55</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>104</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18

<b>A4b (1805005-11)</b>	<b>Matrix: Water</b>	<b>Sampled: Apr-30-18 10:09</b>	<b>Received: May-02-18 09:55</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>108</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18

<b>B1a (1805005-12)</b>	<b>Matrix: Water</b>	<b>Sampled: Apr-30-18 10:51</b>	<b>Received: May-02-18 09:55</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>102</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18

<b>B1b (1805005-13)</b>	<b>Matrix: Water</b>	<b>Sampled: Apr-30-18 10:58</b>	<b>Received: May-02-18 09:55</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>84.0</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18

<b>B2a (1805005-14)</b>	<b>Matrix: Water</b>	<b>Sampled: Apr-30-18 11:40</b>	<b>Received: May-02-18 09:55</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>124</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18

<b>B2b (1805005-15)</b>	<b>Matrix: Water</b>	<b>Sampled: Apr-30-18 11:48</b>	<b>Received: May-02-18 09:55</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>44.0</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18

<b>B3a (1805005-16)</b>	<b>Matrix: Water</b>	<b>Sampled: Apr-30-18 12:29</b>	<b>Received: May-02-18 09:55</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>176</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18



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Water Division, WECA Region 5 77 West Jackson Boulevard Chicago IL, 60604	Project: Central Sands Project Number: CB022018 Project Manager: Cheryl Burdett	Reported: Jun-06-18 14:55
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## Dissolved Solids, SM 2540C (modified) US EPA Region 5 Chicago Regional Laboratory

**B3b (1805005-17) Matrix: Water Sampled: Apr-30-18 12:36 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>56.0</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18

**B4a (1805005-18) Matrix: Water Sampled: Apr-30-18 13:10 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>418</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18

**B4b (1805005-19) Matrix: Water Sampled: Apr-30-18 13:41 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>396</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18

**C1a (1805005-20) Matrix: Water Sampled: Apr-30-18 15:02 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>46.0</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18

**C1b (1805005-21) Matrix: Water Sampled: Apr-30-18 15:27 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>64.0</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18

**C2a (1805005-22) Matrix: Water Sampled: Apr-30-18 16:06 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>448</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18

**C2b (1805005-23) Matrix: Water Sampled: Apr-30-18 16:14 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>70.0</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18

**C3a (1805005-24) Matrix: Water Sampled: Apr-30-18 14:16 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>322</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18



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## Dissolved Solids, SM 2540C (modified) US EPA Region 5 Chicago Regional Laboratory

**C3b (1805005-25) Matrix: Water Sampled: Apr-30-18 14:26 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>62.0</b>			20.0	mg/L	1	B18E010	May-07-18	May-08-18

**C5Aa (1805005-26) Matrix: Water Sampled: May-01-18 06:29 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>492</b>			20.0	mg/L	1	B18E011	May-07-18	May-09-18

**C5Ab (1805005-27) Matrix: Water Sampled: May-01-18 06:43 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>644</b>			20.0	mg/L	1	B18E011	May-07-18	May-09-18

**C6a (1805005-28) Matrix: Water Sampled: May-01-18 07:06 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>416</b>			20.0	mg/L	1	B18E011	May-07-18	May-09-18

**C6b (1805005-29) Matrix: Water Sampled: May-01-18 07:15 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>386</b>			20.0	mg/L	1	B18E011	May-07-18	May-09-18

**C7a (1805005-30) Matrix: Water Sampled: May-01-18 07:48 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>378</b>			20.0	mg/L	1	B18E011	May-07-18	May-09-18

**C7b (1805005-31) Matrix: Water Sampled: May-01-18 08:02 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>450</b>			20.0	mg/L	1	B18E011	May-07-18	May-09-18

**FB2 (1805005-32) Matrix: Water Sampled: May-01-18 07:39 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>U</b>			20.0	mg/L	1	B18E011	May-07-18	May-09-18



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## Dissolved Solids, SM 2540C (modified) US EPA Region 5 Chicago Regional Laboratory

**C7 equip (1805005-33)**

**Matrix: Water      Sampled: May-01-18 07:38      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>U</b>			20.0	mg/L	1	B18E011	May-07-18	May-09-18

**C7b Dup (1805005-34)**

**Matrix: Water      Sampled: May-01-18 08:02      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>444</b>			20.0	mg/L	1	B18E011	May-07-18	May-09-18

**C8a (1805005-35)**

**Matrix: Water      Sampled: May-01-18 08:35      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>216</b>			20.0	mg/L	1	B18E011	May-07-18	May-09-18

**C8b (1805005-36)**

**Matrix: Water      Sampled: May-01-18 08:42      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>84.0</b>			20.0	mg/L	1	B18E011	May-07-18	May-09-18

**C9a (1805005-37)**

**Matrix: Water      Sampled: May-01-18 10:00      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>90.0</b>			20.0	mg/L	1	B18E011	May-08-18	May-09-18

**C9b (1805005-38)**

**Matrix: Water      Sampled: May-01-18 10:21      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>46.0</b>			20.0	mg/L	1	B18E011	May-08-18	May-09-18

**C10a (1805005-39)**

**Matrix: Water      Sampled: May-01-18 11:05      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>128</b>			20.0	mg/L	1	B18E011	May-08-18	May-09-18

**C10b (1805005-40)**

**Matrix: Water      Sampled: May-01-18 11:12      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>196</b>			20.0	mg/L	1	B18E011	May-08-18	May-09-18



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## Dissolved Solids, SM 2540C (modified) US EPA Region 5 Chicago Regional Laboratory

<b>C11a (1805005-41)</b>	<b>Matrix: Water</b>	<b>Sampled: May-01-18 11:46</b>	<b>Received: May-02-18 09:55</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>96.0</b>			20.0	mg/L	1	B18E011	May-08-18	May-09-18

<b>C11b (1805005-42)</b>	<b>Matrix: Water</b>	<b>Sampled: May-01-18 11:52</b>	<b>Received: May-02-18 09:55</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>56.0</b>			20.0	mg/L	1	B18E011	May-08-18	May-09-18

<b>C12a (1805005-43)</b>	<b>Matrix: Water</b>	<b>Sampled: May-01-18 12:41</b>	<b>Received: May-02-18 09:55</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>120</b>			20.0	mg/L	1	B18E011	May-08-18	May-09-18

<b>C12b (1805005-44)</b>	<b>Matrix: Water</b>	<b>Sampled: May-01-18 12:47</b>	<b>Received: May-02-18 09:55</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>126</b>			20.0	mg/L	1	B18E011	May-08-18	May-09-18

<b>C13a (1805005-45)</b>	<b>Matrix: Water</b>	<b>Sampled: May-01-18 13:30</b>	<b>Received: May-02-18 09:55</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>100</b>			20.0	mg/L	1	B18E011	May-08-18	May-09-18

<b>C13b (1805005-46)</b>	<b>Matrix: Water</b>	<b>Sampled: May-01-18 13:39</b>	<b>Received: May-02-18 09:55</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>74.0</b>			20.0	mg/L	1	B18E011	May-08-18	May-09-18

<b>D1a (1805005-47)</b>	<b>Matrix: Water</b>	<b>Sampled: May-01-18 14:19</b>	<b>Received: May-02-18 09:55</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>108</b>			20.0	mg/L	1	B18E011	May-08-18	May-09-18

<b>D1b (1805005-48)</b>	<b>Matrix: Water</b>	<b>Sampled: May-01-18 14:26</b>	<b>Received: May-02-18 09:55</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>62.0</b>			20.0	mg/L	1	B18E011	May-08-18	May-09-18



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## Dissolved Solids, SM 2540C (modified) US EPA Region 5 Chicago Regional Laboratory

**D2a (1805005-49) Matrix: Water Sampled: May-01-18 15:00 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>246</b>			20.0	mg/L	1	B18E011	May-08-18	May-09-18

**D2b (1805005-50) Matrix: Water Sampled: May-01-18 15:06 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>444</b>			20.0	mg/L	1	B18E011	May-08-18	May-09-18

**D3a (1805005-51) Matrix: Water Sampled: May-01-18 15:41 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>352</b>			20.0	mg/L	1	B18E011	May-08-18	May-09-18

**D3b (1805005-52) Matrix: Water Sampled: May-01-18 15:48 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>232</b>			20.0	mg/L	1	B18E011	May-08-18	May-09-18

**D4a (1805005-53) Matrix: Water Sampled: May-01-18 16:19 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>288</b>			20.0	mg/L	1	B18E011	May-08-18	May-09-18

**D4b (1805005-54) Matrix: Water Sampled: May-01-18 16:26 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>648</b>			20.0	mg/L	1	B18E011	May-08-18	May-09-18

**D5a (1805007-01) Matrix: Water Sampled: May-02-18 06:38 Received: May-04-18 10:00**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>98.0</b>	J		20.0	mg/L	1	B18E020	May-09-18	May-11-18

**D5b (1805007-02) Matrix: Water Sampled: May-02-18 06:46 Received: May-04-18 10:00**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>58.0</b>	J		20.0	mg/L	1	B18E020	May-09-18	May-09-18



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## Dissolved Solids, SM 2540C (modified) US EPA Region 5 Chicago Regional Laboratory

<b>D6a (1805007-03)</b>		<b>Matrix: Water</b>	<b>Sampled: May-02-18 07:17</b>	<b>Received: May-04-18 10:00</b>					
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>526</b>	J		20.0	mg/L	1	B18E020	May-09-18	May-09-18

<b>D6b (1805007-04)</b>		<b>Matrix: Water</b>	<b>Sampled: May-02-18 07:29</b>	<b>Received: May-04-18 10:00</b>					
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>380</b>	J		20.0	mg/L	1	B18E020	May-09-18	May-09-18

<b>D7 equip (1805007-05)</b>		<b>Matrix: Water</b>	<b>Sampled: May-02-18 08:01</b>	<b>Received: May-04-18 10:00</b>					
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>52.0</b>	J		20.0	mg/L	1	B18E020	May-09-18	May-09-18

<b>FB3 (1805007-06)</b>		<b>Matrix: Water</b>	<b>Sampled: May-02-18 08:03</b>	<b>Received: May-04-18 10:00</b>					
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>30.0</b>	J		20.0	mg/L	1	B18E020	May-09-18	May-09-18

<b>D7a Dup (1805007-07)</b>		<b>Matrix: Water</b>	<b>Sampled: May-02-18 08:12</b>	<b>Received: May-04-18 10:00</b>					
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>468</b>	J		20.0	mg/L	1	B18E020	May-09-18	May-09-18

<b>D7a (1805007-08)</b>		<b>Matrix: Water</b>	<b>Sampled: May-02-18 08:12</b>	<b>Received: May-04-18 10:00</b>					
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>428</b>	J		20.0	mg/L	1	B18E020	May-09-18	May-09-18

<b>D7b (1805007-09)</b>		<b>Matrix: Water</b>	<b>Sampled: May-02-18 08:19</b>	<b>Received: May-04-18 10:00</b>					
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>548</b>	J		20.0	mg/L	1	B18E020	May-09-18	May-09-18

<b>D8a (1805007-10)</b>		<b>Matrix: Water</b>	<b>Sampled: May-02-18 08:55</b>	<b>Received: May-04-18 10:00</b>					
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>568</b>	J		20.0	mg/L	1	B18E020	May-09-18	May-09-18



# Environmental Protection Agency Region 5 Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605  
Phone: (312)353-8370 Fax: (312)886-2591

Water Division, WECA Region 5 77 West Jackson Boulevard Chicago IL, 60604	Project: Central Sands Project Number: CB022018 Project Manager: Cheryl Burdett	Reported: Jun-06-18 14:55
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## Dissolved Solids, SM 2540C (modified) US EPA Region 5 Chicago Regional Laboratory

<b>D8b (1805007-11)</b>		<b>Matrix: Water</b>	<b>Sampled: May-02-18 09:11</b>	<b>Received: May-04-18 10:00</b>					
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>536</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

<b>D9a (1805007-12)</b>		<b>Matrix: Water</b>	<b>Sampled: May-02-18 09:45</b>	<b>Received: May-04-18 10:00</b>					
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>384</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

<b>D9b (1805007-13)</b>		<b>Matrix: Water</b>	<b>Sampled: May-02-18 09:54</b>	<b>Received: May-04-18 10:00</b>					
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>82.0</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

<b>D10a (1805007-14)</b>		<b>Matrix: Water</b>	<b>Sampled: May-02-18 10:29</b>	<b>Received: May-04-18 10:00</b>					
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>214</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

<b>D10a Dup (1805007-15)</b>		<b>Matrix: Water</b>	<b>Sampled: May-02-18 10:29</b>	<b>Received: May-04-18 10:00</b>					
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>212</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

<b>D10b (1805007-16)</b>		<b>Matrix: Water</b>	<b>Sampled: May-02-18 10:41</b>	<b>Received: May-04-18 10:00</b>					
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>218</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

<b>D10b Dup (1805007-17)</b>		<b>Matrix: Water</b>	<b>Sampled: May-02-18 10:41</b>	<b>Received: May-04-18 10:00</b>					
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>220</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

<b>D11a (1805007-18)</b>		<b>Matrix: Water</b>	<b>Sampled: May-02-18 11:19</b>	<b>Received: May-04-18 10:00</b>					
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>314</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18



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## Dissolved Solids, SM 2540C (modified) US EPA Region 5 Chicago Regional Laboratory

**D11b (1805007-19) Matrix: Water Sampled: May-02-18 11:42 Received: May-04-18 10:00**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>352</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

**E1a (1805007-20) Matrix: Water Sampled: May-02-18 12:41 Received: May-04-18 10:00**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>392</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

**E1b (1805007-21) Matrix: Water Sampled: May-02-18 12:58 Received: May-04-18 10:00**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>377</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

**E2a (1805007-22) Matrix: Water Sampled: May-02-18 13:28 Received: May-04-18 10:00**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>166</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

**E2b (1805007-23) Matrix: Water Sampled: May-02-18 13:37 Received: May-04-18 10:00**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>104</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

**E2a Dup (1805007-24) Matrix: Water Sampled: May-02-18 13:28 Received: May-04-18 10:00**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>162</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

**E2b Dup (1805007-25) Matrix: Water Sampled: May-02-18 13:37 Received: May-04-18 10:00**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>82.0</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

**E3a (1805007-26) Matrix: Water Sampled: May-02-18 14:03 Received: May-04-18 10:00**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>180</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18



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## Dissolved Solids, SM 2540C (modified) US EPA Region 5 Chicago Regional Laboratory

<b>E3b (1805007-27)</b>	<b>Matrix: Water</b>	<b>Sampled: May-02-18 14:09</b>	<b>Received: May-04-18 10:00</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>144</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

<b>E4a (1805007-28)</b>	<b>Matrix: Water</b>	<b>Sampled: May-02-18 14:37</b>	<b>Received: May-04-18 10:00</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>340</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

<b>E4b (1805007-29)</b>	<b>Matrix: Water</b>	<b>Sampled: May-02-18 14:43</b>	<b>Received: May-04-18 10:00</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>324</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

<b>E5a (1805007-30)</b>	<b>Matrix: Water</b>	<b>Sampled: May-02-18 15:08</b>	<b>Received: May-04-18 10:00</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>416</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

<b>E5b (1805007-31)</b>	<b>Matrix: Water</b>	<b>Sampled: May-02-18 15:13</b>	<b>Received: May-04-18 10:00</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>338</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

<b>E6a (1805007-32)</b>	<b>Matrix: Water</b>	<b>Sampled: May-02-18 15:38</b>	<b>Received: May-04-18 10:00</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>86.0</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

<b>E6b (1805007-33)</b>	<b>Matrix: Water</b>	<b>Sampled: May-02-18 15:44</b>	<b>Received: May-04-18 10:00</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>56.0</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

<b>E7a (1805007-34)</b>	<b>Matrix: Water</b>	<b>Sampled: May-02-18 16:09</b>	<b>Received: May-04-18 10:00</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>282</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18



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## Dissolved Solids, SM 2540C (modified) US EPA Region 5 Chicago Regional Laboratory

**E7b (1805007-35) Matrix: Water Sampled: May-02-18 16:35 Received: May-04-18 10:00**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>288</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

**E8a (1805007-36) Matrix: Water Sampled: May-03-18 08:40 Received: May-04-18 10:00**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>332</b>			20.0	mg/L	1	B18E020	May-09-18	May-09-18

**E8b (1805007-37) Matrix: Water Sampled: May-03-18 08:48 Received: May-04-18 10:00**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>352</b>			20.0	mg/L	1	B18E021	May-10-18	May-11-18

**E10a (1805007-38) Matrix: Water Sampled: May-03-18 07:15 Received: May-04-18 10:00**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>94.0</b>			20.0	mg/L	1	B18E021	May-10-18	May-11-18

**E10a Dup (1805007-39) Matrix: Water Sampled: May-03-18 07:15 Received: May-04-18 10:00**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>76.0</b>			20.0	mg/L	1	B18E021	May-10-18	May-11-18

**E10b (1805007-40) Matrix: Water Sampled: May-03-18 07:27 Received: May-04-18 10:00**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>82.0</b>			20.0	mg/L	1	B18E021	May-10-18	May-11-18

**FB4 (1805007-41) Matrix: Water Sampled: May-03-18 07:36 Received: May-04-18 10:00**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>U</b>			20.0	mg/L	1	B18E021	May-10-18	May-11-18

**E10 Equip (1805007-42) Matrix: Water Sampled: May-03-18 07:13 Received: May-04-18 10:00**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>U</b>			20.0	mg/L	1	B18E021	May-10-18	May-11-18



**Environmental Protection Agency Region 5**  
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**Dissolved Solids, SM 2540C (modified)**  
**US EPA Region 5 Chicago Regional Laboratory**

**E9a (1805007-43)                      Matrix: Water                      Sampled: May-03-18 09:53                      Received: May-04-18 10:00**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>308</b>			20.0	mg/L	1	B18E021	May-10-18	May-11-18

**E9b (1805007-44)                      Matrix: Water                      Sampled: May-03-18 10:02                      Received: May-04-18 10:00**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
<b>Total Dissolved Solids</b>	<b>282</b>			20.0	mg/L	1	B18E021	May-10-18	May-11-18



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## Dissolved Solids, SM 2540C (modified) - Quality Control US EPA Region 5 Chicago Regional Laboratory

### Batch B18E010 - General Preparation

Blank (B18E010-BLK1)		Prepared: May-07-18 Analyzed: May-08-18									
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	U			20.0	mg/L						

Duplicate (B18E010-DUP1)		Source: 1805005-05 Prepared: May-07-18 Analyzed: May-08-18									
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	96.0			20.0	mg/L		96.0			0	10

Duplicate (B18E010-DUP2)		Source: 1805005-15 Prepared: May-07-18 Analyzed: May-08-18									
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	50.0	*, Q		20.0	mg/L		44.0			13	10

Duplicate (B18E010-DUP3)		Source: 1805005-21 Prepared: May-07-18 Analyzed: May-08-18									
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	74.0	*, Q		20.0	mg/L		64.0			14	10

Reference (B18E010-SRM1)		Prepared: May-07-18 Analyzed: May-08-18									
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	234			20.0	mg/L				84.5-110		

### Batch B18E011 - General Preparation

Blank (B18E011-BLK1)		Prepared: May-07-18 Analyzed: May-09-18									
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	U			20.0	mg/L						

Blank (B18E011-BLK2)		Prepared: May-08-18 Analyzed: May-09-18									
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	U			20.0	mg/L						



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## Dissolved Solids, SM 2540C (modified) - Quality Control US EPA Region 5 Chicago Regional Laboratory

### Batch B18E011 - General Preparation

Duplicate (B18E011-DUP1)		Source: 1805005-26			Prepared: May-07-18 Analyzed: May-09-18						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	494			20.0	mg/L		492			0.4	10

Duplicate (B18E011-DUP2)		Source: 1805005-36			Prepared: May-07-18 Analyzed: May-09-18						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	76.0			20.0	mg/L		84.0			10	10

Duplicate (B18E011-DUP3)		Source: 1805005-46			Prepared: May-08-18 Analyzed: May-09-18						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	72.0			20.0	mg/L		74.0			3	10

Duplicate (B18E011-DUP4)		Source: 1805005-51			Prepared: May-08-18 Analyzed: May-09-18						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	368			20.0	mg/L		352			4	10

Reference (B18E011-SRM1)		Prepared: May-07-18 Analyzed: May-09-18									
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	242				mg/L	225.0		108%	84.5-110		

Reference (B18E011-SRM2)		Prepared: May-08-18 Analyzed: May-09-18									
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	246				mg/L	225.0		109%	84.5-110		

### Batch B18E020 - General Preparation

Blank (B18E020-BLK1)		Prepared & Analyzed: May-09-18									
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	U			20.0	mg/L						



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## Dissolved Solids, SM 2540C (modified) - Quality Control US EPA Region 5 Chicago Regional Laboratory

### Batch B18E020 - General Preparation

<b>Duplicate (B18E020-DUP1)</b>		<b>Source: 1805007-08</b>			<b>Prepared &amp; Analyzed: May-09-18</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	438			20.0	mg/L		428			2	10

<b>Duplicate (B18E020-DUP2)</b>		<b>Source: 1805007-16</b>			<b>Prepared &amp; Analyzed: May-09-18</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	212			20.0	mg/L		218			3	10

<b>Duplicate (B18E020-DUP3)</b>		<b>Source: 1805007-24</b>			<b>Prepared &amp; Analyzed: May-09-18</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	146			20.0	mg/L		162			10	10

<b>Duplicate (B18E020-DUP4)</b>		<b>Source: 1805007-32</b>			<b>Prepared &amp; Analyzed: May-09-18</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	80.0			20.0	mg/L		86.0			7	10

<b>Reference (B18E020-SRM1)</b>		<b>Prepared &amp; Analyzed: May-09-18</b>									
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	228				mg/L	225.0		101%	84.5-110		

### Batch B18E021 - General Preparation

<b>Blank (B18E021-BLK1)</b>		<b>Prepared: May-10-18 Analyzed: May-11-18</b>									
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	U			20.0	mg/L						

<b>Duplicate (B18E021-DUP1)</b>		<b>Source: 1805007-37</b>			<b>Prepared: May-10-18 Analyzed: May-11-18</b>						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	336			20.0	mg/L		352			5	10



# Environmental Protection Agency Region 5 Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605  
Phone:(312)353-8370 Fax:(312)886-2591

Water Division, WECA Region 5 77 West Jackson Boulevard Chicago IL, 60604	Project: Central Sands Project Number: CB022018 Project Manager: Cheryl Burdett	<b>Reported:</b> Jun-06-18 14:55
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## Dissolved Solids, SM 2540C (modified) - Quality Control US EPA Region 5 Chicago Regional Laboratory

### Batch B18E021 - General Preparation

Reference (B18E021-SRM1)

Prepared: May-10-18 Analyzed: May-11-18

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Dissolved Solids	234				mg/L	225.0		104%	84.5-110		



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Project: Central Sands  
Project Number: CB022018  
Project Manager: Cheryl Burdett

**Reported:**  
Jun-06-18 14:55

**Notes and Definitions**

- J The identification of the analyte is acceptable; the reported value is an estimate.
- \* This Quality Control measure meets the requirements of the CRL SOP for this analyte.
- U Not Detected
- NR Not Reported
- Q QC limit Exceeded